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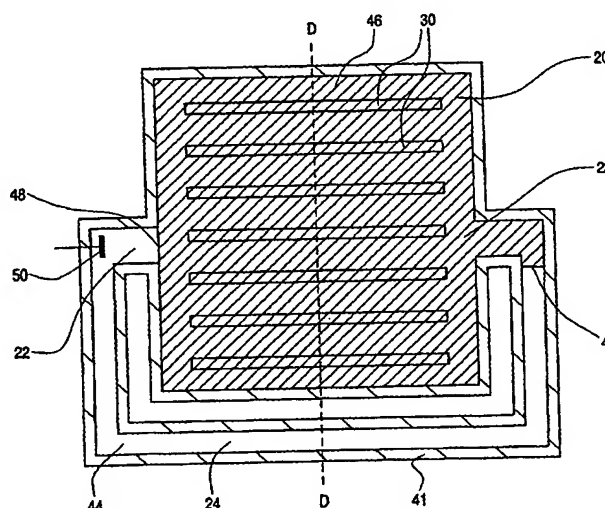
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[Continued on next page]

(54) Title: **ELECTROWETTING OPTICAL SWITCH**



(57) **Abstract:** A switchable optical element having a first discrete state and a different, second discrete state. The element comprises a fluid system including a first fluid (44) and a different, second fluid (46), a wavefront modifier (26) having a face (28); and a fluid system switch for acting on the fluid system to switch between the first and second discrete states of the element. When the element is in the first discrete state, the face (28) of the wavefront modifier (26) is substantially covered by the first fluid (44). When the element is in the second discrete state, the face of the wavefront modifier is substantially covered by the second fluid (46). The fluid system switch comprises a configuration of electrodes arranged to act on the fluid system by the application of electrowetting forces and a voltage control system arranged to control voltages applied to the configuration of electrodes to switch between the first and second discrete states of the element.